

REMARKS

Claims 1 - 17 remain in this application. Claim 1 has been amended. Reconsideration of this application in view of the amendments noted is respectfully requested.

In the Office Action, claims 1 - 17 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to specifically point out and distinctly claim the subject matter which applicant regards as the invention. More particularly, the Office Action stated that the claims do not clearly define the steps required to perform the method/process.

Claim 1 has been amended to read:

Method for providing an index (BFI) depicting a person's accumulated body fatigue, the method comprising the steps of:

measuring the person's intensity of physical activity through one or more parameters from the measurement of one or more signals obtained sequentially as input, said parameters being information on the intensity of the person's physical activity;

setting a predetermined initial value to the index (BFI);

calculating an upslope component and an optional downslope component of the index (BFI) determined with said parameters;

calculating a combination of the upslope and the optional downslope components;

calculating each next value of the index (BFI) as a sum of the previous value of the index (BFI) and a difference formed from said combination;

wherein the upslope component and the optional downslope component are each calculated according to a function, which is scaled by a preset physiological character.

Applicant submits that amended claim 1 clearly defines the steps of the present method and is therefore definite. Applicant further submits that claims 2 - 17 are also definite. Applicant therefore respectfully requests that the Section 112, second paragraph rejection of claims 1 - 17 be withdrawn.

Claims 1 - 17 were also rejected under 35 U.S.C. 101 as being directed to non-statutory subject matter. Specifically, the Office Action asserted that the claims describe a method that is essentially a process for manipulating data using known mathematical concepts. The method, however, is not merely manipulation of data using known mathematical concepts. Instead, the method is a method for providing a body fatigue index depicting a person's accumulated body fatigue. The method includes the steps of: measuring the person's intensity of physical activity through one or more parameters from the measurement of one or more signals obtained sequentially as input, the parameters being information on the intensity of the person's physical activity; setting a predetermined initial value to the index (BFI); calculating an upslope component and an optional downslope component of the index (BFI) determined with the parameters; calculating a combination of the upslope and the optional downslope components; calculating each next value of the index (BFI) as a sum of the previous value of the index (BFI) and a difference formed from the combination; wherein the upslope component and the optional downslope component are each calculated according to a function, which is scaled by a preset physiological character. These steps are not mere manipulation of data using known mathematical concepts.

Applicant submits that the claims are drawn to statutory subject matter and respectfully requests that the Section 101 rejection of claims 1 - 17 be withdrawn.

Claims 1 - 17 were rejected under 35 U.S.C. 102(e) as being anticipated by Fukuda (U.S. Patent Application No. 6,516,222). Applicant respectfully traverses this rejection. Fukuda discloses an apparatus for determining a degree of fatigue of a human body. Fukuda measures the amount of swelling in the limb of a human body such as a person's leg by measuring the bioelectrical impedance of the limb. The measurement is compared

to a baseline reference previously obtained for the same person. The difference between the measurement and the baseline measurement is used to indicate a degree of fatigue.

Fukuda, however, fails to disclose a method for providing a body fatigue index (BFI) depicting a person's accumulated body fatigue as in the present invention. For instance, Fukuda fails to disclose the step of measuring a person's intensity of physical activity through one or more parameters from the measurement of one or more signals obtained sequentially as input, the parameters being information on the intensity of the person's physical activity, as claim 1 requires. Fukuda does not measure parameters that are information on the intensity of a person's physical activity. Instead, Fukuda measures the bioelectrical impedance of a person's body to determine the amount of body water/fluid in the person, and therefore the amount of swelling. In contrast, in the present method, information on the intensity of a person's physical activity may be, for example, physiological (internal) information such as heart rate, level of oxygen consumption, respiratory interval and ventilation, skin temperature, and energy consumption. Information on the intensity of a person's physical activity may also be the person's movement and acceleration. A person's movement can be measured by a GPS-system, a pedometer, an accelerometer, or by devices included in fitness equipment. (See specification page 8, line 30 through page 9, line 10).

Fukuda also fails to disclose setting a predetermined initial value to the index (BFI), as claim 1 requires. There is no initial value for the degree of fatigue in Fukuda. Instead, in Fukuda the degree of fatigue is simply calculated as the difference between a measurement of the amount of swelling and a baseline reference value.

Further, Fukuda fails to disclose calculating an upslope component and an optional downslope component of the index (BFI) determined with the above-mentioned parameters, as claim 1 requires. Nor does Fukuda disclose calculating a combination of the upslope and the optional downslope components, as claim 1 requires. Again, in Fukuda the degree of fatigue is simply calculated as the difference between a measurement of the amount of swelling and a baseline reference value. Fukuda does not teach calculating an upslope and

downslope component of the degree of fatigue. Nor does Fukuda teach calculating a combination of an upslope and downslope component.

Moreover, Fukuda fails to disclose calculating each next value of the index (BFI) as a sum of the previous value of the index (BFI) and a difference formed from the combination of the upslope and downslope components, as claim 1 requires. Once again, in Fukuda the degree of fatigue is simply calculated as the difference between a measurement of the amount of swelling and a baseline reference value. The degree of fatigue in Fukuda is not measured with any relation to previous values of the degree of fatigue. Nor is the degree of fatigue in Fukuda calculated as a sum of a previous value and a difference formed from a combination of upslope and downslope components. There are no upslope and downslope components in Fukuda.

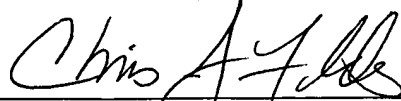
For all of these reasons, claim 1 is not anticipated by Fukuda. Claims 2 - 17 depending directly or indirectly from claim 1, are also not anticipated by Fukuda. Therefore, applicant respectfully requests that the Section 102(e) rejection of claims 1 - 17 as anticipated by Fukuda be withdrawn.

This amendment and request for reconsideration is felt to be fully responsive to the comments and suggestions of the examiner and to place this application in condition for allowance. Favorable action is requested.

Respectfully submitted,

Sami Saalasti et al.

Fildes & Outland, P.C.

A handwritten signature in black ink, appearing to read "Chris J. Fildes", is written over a horizontal line.

Christopher J. Fildes, Attorney
Registration No. 32,132
20916 Mack Avenue, Suite 2
Grosse Pointe Woods, MI 48236
(313) 885-1500